

REMARKS

Claims 2-9 and 12 are pending in this application. Claims 2, 3, 5 and 9 are amended. Claims 10 and 11 are cancelled. In the Office Action, claims 2-9 and 12 are rejected over prior art. Reconsideration of the rejection is respectfully requested.

Applicants thank the Examiner for his time and consideration for the telephonic interview of December 8, 2005.

CLAIM REJECTION UNDER 35 U.S.C. §112

Claims 2-9 and 12 are rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. The rejection is respectfully traversed.

Applicants have amended claims 2, 3, 5, and 9 to replace “metal-containing compound” with “organometallic containing compound,” as originally filed. Applicants respectfully request entrance of the amendment, because the amendment places the claims in condition of allowance.

CLAIM REJECTION UNDER 35 U.S.C. §103

Claims 2 or 3 are rejected under 35 U.S.C. §103(a) as being unpatentable over Chen et al. (USP 5,989,653) in view of Clarke et al. (USP 4,869,930). This rejection is also respectfully traversed.

The Examiner alleges that Chen et al. teaches a process of applying a catalyst solution to a substrate. The Examiner further alleges “Chen et al. fails to teach reducing or oxidizing [catalyst solution] to form the metal pattern.”

The Examiner has acknowledged that Chen et al. teaches forming a catalyst solution relative to a substrate. However, Chen et al. discloses that the catalyst solution includes a polymer carrier, catalyst ions, and solvents. Further, the polymer should not complex with the catalyst. Column 3, lines 35-60. In other words, the catalyst solution cannot be an organometallic-containing compound.

Applicants submit that distinctions of claim 2 over Chen et al. include an organometallic-containing compound as well as reducing or oxidizing the organometallic-containing compound to form a metal pattern. In other words, Chen et al. specifically discloses that its catalyst solution cannot be an organometallic-containing compound.

The Examiner alleges that Clarke et al. “teaches a method of preparing substrates for deposition of metal seed from an organometallic material.” In other words, Clarke et al. discloses the use of an organometallic compound. Applicants respectfully submit that a combination of Chen et al. and Clarke et al. fails to disclose all the limitations of the claim 2. In addition, Applicants submit that an organometallic compound of Clarke et al. cannot be substituted for a catalyst solution of Chen et al, because the physical and chemical differences between the organometallic compound and the catalyst solution are incompatible for their respective intended purposes (as disclosed by Chen et al). Chen et al. teaches away from combining a catalyst solution and an organometallic compound. Therefore, for at least the reasons given above, claim 2 is patentable over the combination of Chen et al. and Clarke et al. For similar reasons given with respect to the patentability of claim 2, claim 3 is also patentable over the combination of Chen et al. and Clarke et al.

Claims 2-5 and 12 are rejected under 35 U.S.C. §103(a) as being unpatentable over IBM Technical Bulletin, Nov. 1989 or Hill et al. (USP 5,534,312) in combination with Chen et al. This rejection is also respectfully traversed.

The Examiner admits that that IBM Technical Disclosure Bulletin (Bulletin) fails to “teach electrolessly coating the metal layer.” This is because once the organometallic powder is applied to a substrate and the powder is thermally treated, the formation of a wiring pattern (according to the Bulletin) ends. No additional steps are required. The Bulletin on page 2, further discloses that “to build up composite structures”, the steps of applying the powder and thermal treatment are repeated. A person of ordinary skill would not have been motivated to combine other teachings of a reduction process or an oxidation process and growing crystals, because the Bulletin teaches that a wiring pattern process is completed after thermally treating the wire pattern.

In addition, Chen et al., as admitted by the Examiner in the Final Office Action, fails to disclose a reduction process or an oxidation process. Therefore, Chen et al. fails to cure the deficiencies of the Bulletin. A combination of the Bulletin and Chen et al. still fails to disclose all the limitation of the instant claims.

As the Examiner has noted, Hill et al. fails to teach an electrolessly coating process and a reduction process or an oxidation process. As noted above, the same is true of the Bulletin, hence, a combination of the Hill et al. and Chen et al. still fails to disclose all the limitation of the instant claims.

Claims 5-9 and 12 are rejected under 35 U.S.C. §103(a) as being unpatentable over IBM Technical Bulletin, Nov. 1989 in combination with Chen et al. further in combination with Clarke et al. This rejection is also respectfully traversed.

As discussed above, a combination of the Bulletin and Chen et al. fails to disclose all the limitation of the instant claims, and even if Clarke et al. is combined with the Bulletin and Chen et al. (see discussion above), the combination still fails to disclose all the limitation of the instant claims.

For at least the reasons above, claims 2-9 and 12 are patentable over the combination of Chen et al. and Clarke et al.

CONCLUSION

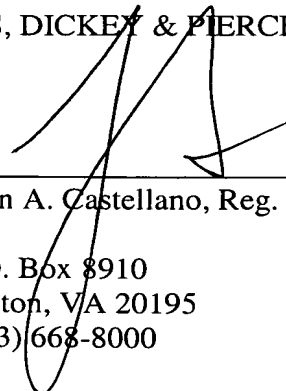
In view of the above remarks, reconsideration of the rejections, further examination and allowance of claims 2-9 and 12 are respectfully requested.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact John A. Castellano at the telephone number of the undersigned below. If the Examiner believes that a personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (703) 668-8000.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

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